# NOTES ICHTYOLOGIQUES

**CAPTURE OF THE ST. HELENA BUTTERFLY FISH, *CHAETODON SANCTAEHELENAE* (CHAETODONTIDAE) IN THE CANARY ISLANDS.** **Alberto BRITO** and **Jesús M. FALCON**, Departamento de Biología Animal (Ciencias Marinas), Universidad de La Laguna, Tenerife, Canary Islands, SPAIN.

**RÉSUMÉ**. - Un exemplaire de *Chaetodon sanctaehelenae* Günther, 1868 (Chaetodontidae) a été capturé près du port de Santa Cruz de Tenerife, Iles Canaries. L'importance de la navigation et des zones portuaires sur la dispersion des espèces est discutée.

Key-words. - Chaetodontidae, *Chaetodon sanctaehelenae*, ASE, Canary I., First record, Biogeography.

*Chaetodon sanctaehelenae* is a species only known from St Helena and Ascension (Poll, 1950; Bauchot and Blanc, 1961; Maugé, 1981, 1990; Edwards, 1990). It is common in shallow water from the surface to 15 m deep, less commonly seen to at least 25 m deep, and usually observed in pairs or large groups, according to the last mentioned author.

The studied specimen was captured in the surrounding waters of the harbour of Santa Cruz de Tenerife (Fig. 1) in October 1993, using a fish trap, at approximately 20 m deep. The specimen is preserved in the fish collection of the Department of Animal Biology (section of Marine Sciences) of the University of La Laguna (CCML), referenced as 01/320. The body measurements of the fish were the following: total length, 108 mm; standard length, 91 mm; head length, 25 mm; eye diameter, 9 mm; body height 59 mm. Radial formulae: D: XIII + 21; A: III + 19; P: 14. Number of lateral-line scales: 42. Number of gill-rakers on first arch: 20.

It shows the typical morphometric, meristic and colour characteristics of *C. sanctaehelenae*, as described by the above mentioned authors, except the presence of one more gill-raker on the left first arch (20 versus 18-19).

An individual of this species was also observed and photographed by several SCUBA divers, during 1993, near the yacht harbour at Radazul, located to the south and relatively close (less than 7 km) to the port area of Santa Cruz de Tenerife. The individual from Radazul disappeared a few days before the one from Santa Cruz de Tenerife was captured. Nevertheless, it seems highly unlikely that it would be the same individual as 7 km is a very long distance for most home-ranging reef species to travel. The one observed in Radazul was seen on rocky bottoms at depths between 15 and 25 m, always with large groups of the pomacentrid *Chromis limbatus* (Valenciennes, 1833).

The presence of rare species in the Canary Islands has been previously recorded by Brito (1991). In most cases, at least those involving species with tropical affinities, their populations are unstable. For example, this is certainly the case for the serranid *Cephalopholis nigri* (Günther, 1859) and the pomacentrid *Abudefduf saxatilis* (Linnaeus, 1758), which were also found in the harbour of Santa Cruz de Tenerife. These species have a relatively wide distribution area in continental or tropical insular areas adjacent to the Canary Islands. Nevertheless, the case of the St Helena Butterfly fish is noteworthy because it is a species that was previously restricted to St. Helena and Ascension. We think that its presence in the Canary Islands can not be attributed to a possible natural way of dispersion such as the case of the *Chaetodon hoefleri* Steindachner, 1881. This African species appears from time to time in the Canaries (in the eastern islands) (Brito, 1991), its populations can not either be considered stable, and its presence in the Canarian archipelago could be related to the eggs and larvae transport with sporadic currents or with the Southeast winds arising from the next African coast, which blow the surface layer away.

We think that the intense navigation across the Atlantic Ocean could be the responsible of the appearance of *Chaetodon sanctaehelenae* in the Canaries, producing the arrival of the diasporas (probably eggs or larvae), possibly transported with the ballast of the ships. Up to a point, the harbours constitute an important way of entrance for the marine species because the lesser competitive pressure of the local faunas. The importance of the navigation and of the port

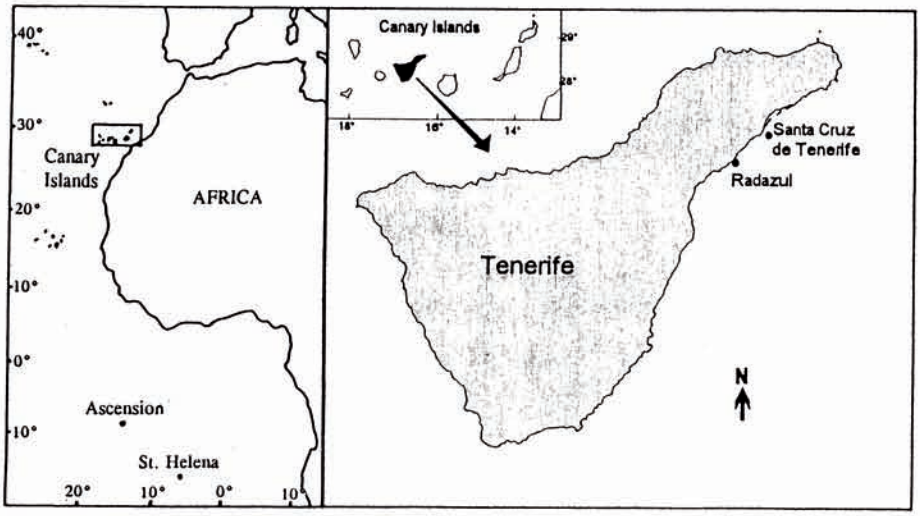


Fig. 1. - Map of the Canary Islands and situation of the locations where *Chaetodon sanctaehelenae* was captured or seen.

zones on the dispersion of the marine organisms has been demonstrated by other authors such as Zibrowius (1983), for the invertebrates, although it is less documented in the case of fishes.

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